Using the PDMRA Calculator

The Post-Deployment / Mobilization Respite Absence (PDMRA) calculator automates the determination of Soldier PDMRA entitlement days at the unit level. It uses an expandable standard Excel spreadsheet to render the information. While the program keeps many of the functions locked to the standard user, it is still possible to customize the display of the program to meet individual unit needs. This paper will walk step-by-step through the process of adding Soldiers to the database.

Upon initial deployment of the PDMRA calculator, you should replace the line "Your Unit Here" along the top with the name, slogan or phrase used to identify your Company, Battalion or other element. This has no impact on the operation of the other functions in the program, and can be left as-is if desired.

The following pages will explain various portions of the PDMRA spreadsheet.

LINKS:

The All-Army Activity Message which authorizes award of PDMRA:
http://www.armyg1.army.mil/MilitaryPersonnel/ppg/ALRACT173 2007 PDMRA.doc

The Personnel Policy Guidance detailing how to award it:
http://www.armyg1.army.mil/MilitaryPersonnel/ppg.asp

S1Net Message Forum (for specific questions about interpretation of guidance)
https://forums.bcks.army.mil/secure/CommunityBrowser.aspx?id=217567

AKO Login is required for the S1Net forums.

OVERVIEW

The PDMRA Calculator consists of two main modules; one is an overview calculator which gives at-a-glance information for all personnel in the database, the other allows in-depth look at a single Soldier's PDMRA entitlements. Entries can be made through either module into the master database, but it is recommended that the overview page (the Calculator module) be used for most cases, as that is where all error checking is performed. If data is entered through the GraphIt! page, users should remove the by-row error silencer for the data and recalculate it.

 This portion of the sheet is everything to the left of the NAME column, with that column inclusive.

Suppress All Errors: The topmost portion is a box entitled "Suppress All Errors". This box, when checked, will block the program from sending error messages to the user. The program will continue to internally correct faults it can on its own, but will send no messages. *The program author recommends that this box remain unchecked in most cases*.

Clear Empty Lines: This button is a macro which, when pressed, will erase empty lines from the spreadsheet and reformat the borders around the page. When deleting entries from the system, you should use this method rather than row-deletion (only possible if you unprotect the sheet first), as this way guarantees that the program's internal data functions will remain unaltered.

Recalculate: This button will force-recalculate all cells on the sheet. It is usually not necessary unless you, as the user, have disabled auto calculation in Excel as a global setting.

HELP: This button will create a small message box with general help information in it.

Grey Box: The leftmost column of the spreadsheet is a small grey or white box. This is a by-line error suppression setting. It is the recommended method of suppressing errors for a specific user (as opposed to the global setting mentioned above). To begin line suppression, enter an "X" in this column for the row you wish to silence. To clear the suppression, simply highlight that box and press the "delete" key.
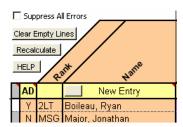
AD: This column indicates whether the Soldier in a particular row is Active Duty or Reserve/National Guard. This is important, as the algorithms used to calculate PDMRA differ between the two. The program determines Active Duty PDMRA based on the past 36 months of deployment history; Reserve/NG PDMRA is dependent upon the past 72 months. This setting will be auto filled with the "New Line" (see below) macro. It will use whatever you have more than half of – if more than 50% of your entries are Reserve / NG, then it will put an "N" here, otherwise a "Y" will be placed here. This row is also what determines the country selections later in the worksheet.

Rank: This is a pull-down menu which allows selection of all ranks within the Army. It has no bearing on the rest of the program, but is useful when referring to data. It is also

used when formulating error messages to help isolate the row causing the warning or error.

Name: The name entry is free-form and can be in whatever method you prefer. It is recommended that at least last names be used, or last name-first name if you choose. Also, if there are multiple lines of the same last name, they should be differentiated from in some method (such as Smith and Smith1) to allow the GraphIt! page to function properly.

New Entry: This button will add a new line, with the formulae inserted properly to allow entry of additional names.

DEPLOYMENT ENTRIES

This is the area from which the PDMRA calculator gathers most of its entitlement data. In its simplest form, this has start and end dates for up to eight deployments per Soldier, spanning as much as twenty years. In the selection bar (the yellow row beneath the angled row), buttons allow you to expand or contract the data as necessary.

Deployment Start / Deployment End: These cells are where you should enter the start and end date for each deployment. If you enter them backwards, the program will reverse them internally for calculation purposes and warn you that they are backwards. It will also compare each successive deployment with the data before it, to ensure that it is usable. When the program sends a warning message about this information, you should carefully review your data. If you are certain the data is correct, you can silence the errors for that line as discussed in the Administrative Area chapter previously.
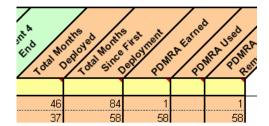
Country: The country cell is an optional one. However, you should fill it in to ensure that the location (or deployment code) is usable for PDMRA calculations. You choose the country via the pull-down selection box in each cell. For Active Duty Soldiers, this choice reflects countries to which a deployment may have occurred. To date, only Iraq, Afghanistan and certain units in Kuwait are entitled to PDMRA. The others, although listed, will not result in PDMRA entitlements. For units assigned to Kuwait which qualify due to their missions in Iraq, then Iraq option should be used.

The PDMRA memo states that Reserve and National Guard entitlements are dependent upon the USC mobilization code given in the orders or on the DD214 (for previous deployments). You should enter this code to determine if the Soldier is entitled to PDMRA calculations for a particular deployment or not.

Hide Country Data / Show Country Data: This button (which changes dependent upon whether the Country row is visible or not) will alternately hide or reveal the country column. Each deployment set has its own row for country entry which can be revealed individually via the button within that area.

More or **Less:** In the Deployment 4 portion, there is also another button, entitled "**More…**" or "**Less…**" which will allow you to expand or collapse the columns for Deployments 5 thru 8. Calculations still occur regardless of whether a column is hidden or visible.

TABULATED DATA

...nt 4 End	Total Months Deployed	Total Months Since First Deployment	PDMRA Earned	PDMRA Used	PDMRA Rem...
	46	84	1		1
	37	58	58		58

This area is where the PDMRA Calculator displays its calculations. With the exception of one column, the program automates this data and should not require intervention by the user.

Total Months Deployed: This column will show the total number of deployment months represented by the deployment data entered, regardless of whether they are valid for PDMRA calculations or not. It is purely informative in nature, and has no bearing on the operation of the program.
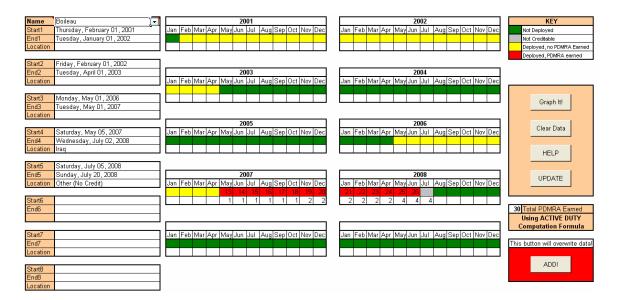
Total Months Since First Deployment: This tells the total amount of months spanned from the first deployment to the current date, or to the end of the last deployment (if that date is in the future). With the previous column, this allows Commanders and others to see how many months within a period of time a particular Soldier has deployed. Taking the sample in the picture above, one could say that Soldier has been deployed 46 out of the past 84 months, or that the Soldier first deployed 84 months ago.

PDMRA Earned: This column is the representation of PDMRA entitlements the Soldier has earned, based on the most recent deployment. The Personnel Policy Guidance stipulates that only PDMRA for the most recent deployment is countable, therefore it will not span multiple deployments. That is, the number is not cumulative over multiple deployments. Therefore, a Soldier should use their PDMRA days prior to deploying again. These days are also not transferable to new units, so should be used before or during a Soldier's PCS to a new duty station.

PDMRA Used: This column is where a unit would track how many days a Soldier has used of his or her PDMRA entitlement. As a Soldier completes PDMRA leave, the days should be entered here (or added to the value already in this column) so the program can determine how many days are remaining. If a Soldier begins a new deployment, regardless of whether they have PDMRA days remaining from a previous one, this value should be cleared out, as prior PDMRA entitlements do not carry into new deployments.

PDMRA Remaining: This will show the remaining PDMRA entitlement, based upon the PDMRA earned minus the PDMRA used.

GRAPHIT!

Name Boileau
Start1 Thursday, February 01, 2001
End1 Tuesday, January 01, 2002
Location

Start2 Friday, February 01, 2002
End2 Tuesday, April 01, 2003
Location

Start3 Monday, May 01, 2006
End3 Tuesday, May 01, 2007
Location

Start4 Saturday, May 05, 2007
End4 Wednesday, July 02, 2008
Location Iraq

Start5 Saturday, July 05, 2008
End5 Sunday, July 20, 2008
Location Other (No Credit)

Start6
End6

Start7
End7
Location

Start8
End8
Location

KEY
Not Deployed
Not Creditable
Deployed, no PDMRA Earned
Deployed, PDMRA earned

Graph It!
Clear Data
HELP
UPDATE

30 Total PDMRA Earned
Using ACTIVE DUTY Computation Formula

This button will overwrite data!
ADD!

The GraphIt! Sheet is a companion to the PDMRA Calculator which allows the user to see a graphical, calendar-driven display of the data for an individual Soldier.

Name Selection: Names from the PDMRA Calculator sheet are viewable in the pull down menu underneath "Select Name". It is possible to type a name in here as well, but it must match exactly the name as it appears on the other sheet. If two names are exactly the same, GraphIt! will only match the first name in the list, and will not find the second. If this situation occurs, making one of the names unique by adding a number at the end, or the Soldier's first initial, will allow them both to be selected.

AD: Selecting "Y" here will make the GraphIt! routine use the Active Duty algorithm; a "N" will use the National Guard / Reserve algorithm.

Deployment Information: If running the GraphIt! button, deployment information from the selected name will be displayed here. Alternately, it is possible to update, change or create a new deployment set here and add it to the master spreadsheet. The deployment countries are dependent upon the AD selection (Active Duty is given a selection of countries, otherwise a selection of USC deployment codes).

GraphIt!: This button will run the macro to graph the data into the spreadsheet.

Clear Data: This will erase the current display in the spreadsheet, returning it as it appears above.
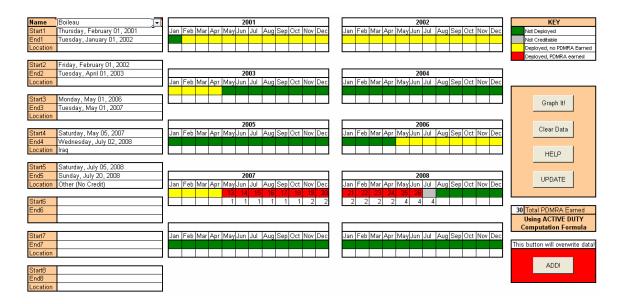
HELP: This button will display basic help about the functions of GraphIt!

UPDATE: This button will update the graph with changes you've made in the deployment data set on this page, without altering anything stored on the Calculator page.

More specifically, it allows the user to view how changes to various bits of data alter the PDMRA calculations, but does not permanently alter the data on the other spreadsheet.

Total PDMRA Earned: This box represents the sum of all the days earned on the sheet. These will correspond to the value of PDMRA earned on the PDMRA calculator, but show it in monthly format. Directly beneath this will be a message saying which algorithm (Active Duty or Reserve/NG) the program used to derive the data.

Calendar boxes: This is where the program displays its PDMRA calculations. Each box is representative of one month, as indicated by the month names. Each span of twelve boxes represents one calendar year, whose date the function will fill in during the calculation process. Boxes which are green, when complete, represent time the Soldier spent at home. Grey boxes indicate time not creditable for PDMRA calculations, such as a deployment for an Active Duty Soldier to Bosnia, or a Reservist under 12301(d) mobilization orders. Yellow boxes indicate past deployments or a current deployment which has not yet gained sufficient days to count towards PDMRA calculations. Red boxes are boxes in which the calculator awarded PDMRA credit for the month. Inside the red box will be a number indicating the quantity of previous months within the 36 month (72 month for Reservist/NG) window qualified as countable up to and including that current month.

ADD!: This button will take the data as represented in the righthand column of GraphIt and, if the name already exists, update that entry with the data represented here. If the name does not exist, it will be added in a new row on the spreadsheet.

FREQUENTLY ASKED QUESTIONS

1. **When I calculate my dates, they are way off what I projected to have.**
   Check your data carefully. If you have errors suppressed for that line, or globally, turn off the errors and reenter a cell's data – this will force the program to recalculate it. If it is still way off, make sure that you are using the correct algorithm (have a "Y" in AD if active duty, otherwise a "N" for reserve or National Guard).

   Also, many people erroneously calculated their days without truly understanding the "rolling window". MAJ Miller developed a great PowerPoint briefing which explains this in depth, and this may be the cause for confusion over entitled days. That brief, as well as other pertinent documents, can be found at:
   https://forums.bcks.army.mil/secure/CommunityBrowser.aspx?id=397183

   Several people vetted the statistical data calculated by this program to ensure the algorithms properly captured the data IAW the DA intent. If you still feel it is incorrect, send an email to ryan.boileau@us.army.mil with the data set in question.

2. **I get a #VALUE or #NAME error in the spreadsheet, and no PDMRA is calculated for that person. Also, GraphIt! won't work for anyone while that error is there.**
   If you are getting #VALUE or #NAME errors on a row, it means you have put something in there incorrectly. Confirm that you have dates where dates are supposed to go and countries where countries are supposed to go. If so, try re-entering (not copying and pasting) the data on a new line. Data should never be pasted into the spreadsheet, as it can invalidate the formulae used to calculate the entitlements.

   If you continue to get the same error, send an email to ryan.boileau@us.army.mil with the data set in question and, if it can be replicated the bug will be resolved.

3. **I don't know what a data set is, or how to send it.**
   A data set can be either the row of data, separated by commas, or a cut and paste of the row itself into a document, email, or blank excel sheet. It is not necessary to send the entire spreadsheet you are using, just the row in question.

4. **I run GraphIt! and sometimes a month is grey but still has credit for PDMRA.**
   If a subsequent deployment begins in the same month as the previous ends, and it is a non-awardable deployment (most often USC 12301(d) code), then GraphIt! assumes the second deployment is an extension as authorized by DOD Directive for the purpose of using the PDMRA entitlement days. This should be the only instance wherein a grey box appears with PDMRA credit. If another shows up,

and can be replicated, send an email to ryan.boileau@us.army.mil with the data set for debugging.

5. **I've checked all my dates, and they are all correct. I haven't put anything in backwards, or in the wrong place. I don't get any warning messages, and I don't have errors suppressed. But I still get a #VALUE error in the PDMRA Earned column.**
In the (unlikely) event this happens, and the data is all genuine, it means that the span of time from the beginning deployment to the completion of the final deployment has exceeded 20 years. That, or there is a flaw in the calculations somewhere of which the author is not aware. Please send an email to ryan.boileau@us.army.mil with the data set for debugging.

6. **I changed the names of the sheets, or their order, and now everything's broken!**
The program functions rely upon the sheets being a specific name, and probably even a specific order (I never tested moving them around). Make sure they're in the original order and names and it should fix itself. Due to time constraints on developing a usable program, external controls to mitigate events such as this were not added.

7. **I cleared out deployment dates but I'm still seeing PDMRA entitlement for a Soldier.**
Chances are you have one or more deployment sets still in the system, in a hidden row. Click on "Show Country" for Deployment 4 data, and then the "More…" button to expand Deployments 5 thru 8.

8. **I want to change something in a cell, but I can't click on it.**
The program automatically protects the cells as soon as it performs any calculation. To access a protected cell, you will need to go to Tools->Protection->Unprotect Sheet. Bear in mind that the program may overwrite some cells during its calculation process.

9. **One of my Soldiers had 30 (or any other number) days of PDMRA earned before the last deployment. When I put in this new deployment information, the number is less! How is that possible?**
The PDMRA calculator resets its values and determines new numbers based on the last deployment data set. Any number of unused PDMRA days a Soldier has prior to a new deployment is lost with the new deployment. It does not carry over to a subsequent time period. Commanders should encourage eligible Soldiers to use their PDMRA time before beginning a new deployment.

10. **Why can't the GraphIt program accommodate two people with the same name?**
It could, but it was simpler to write it this way. Adding a unique identifier to each name, such as SmithJ and SmithK, is an easy way to workaround the problem.

Due to the way Excel manipulates data, it becomes highly intensive to have the program determine the proper cell location of the name in the GraphIt pull-down.

11. I have Soldiers who perform back-to-back deployments in the same month. Both deployments are creditable under the guidance for PDMRA. Why isn't the PDMRA cumulative?
PDMRA is calculated based on the last creditable deployment a Soldier underwent. Although this program does account for non-creditable deployments (in terms of figuring PDMRA for the previous one), it is beyond its scope to selectively determine whether a previous deployments PDMRA should be cumulative with the current deployment.

12. Why do you just warn us of changes made instead of having the program automatically correct errors we make, such as reversing date entries and having dates which are too old?
It has to do with the way the author wrote the initial portion of the program. Before it became apparent other units could benefit from it, the author used functions to auto calculate data entered. Due to the nature of how Excel handles data for functions (as opposed to subroutines), it is not possible to manipulate the raw data passed to the function. While those functions could be rewritten to use macros, development of the program would have been set back too far to meet the needs of HRC.

13. I have a Soldier who was Active Duty on the last deployment, and then crossed into the Reserve (or National Guard). How do I figure their entitlements for future deployments?
The S1Net website explains this much better than could be done here. Please see the links referenced on the first page of this document.